

FIG. 1

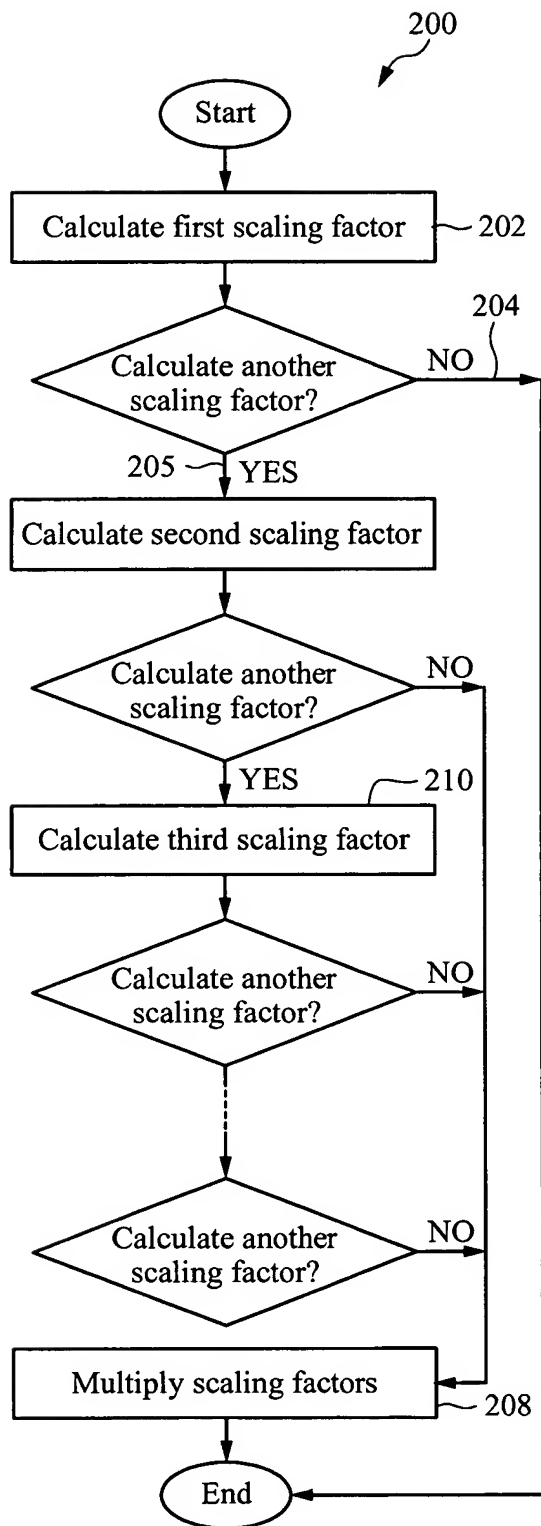


FIG. 2

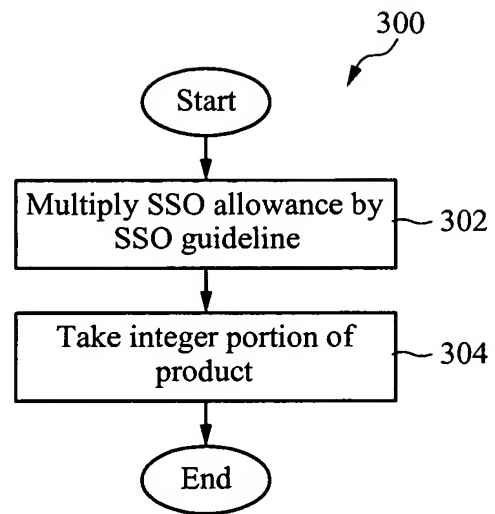


FIG. 3

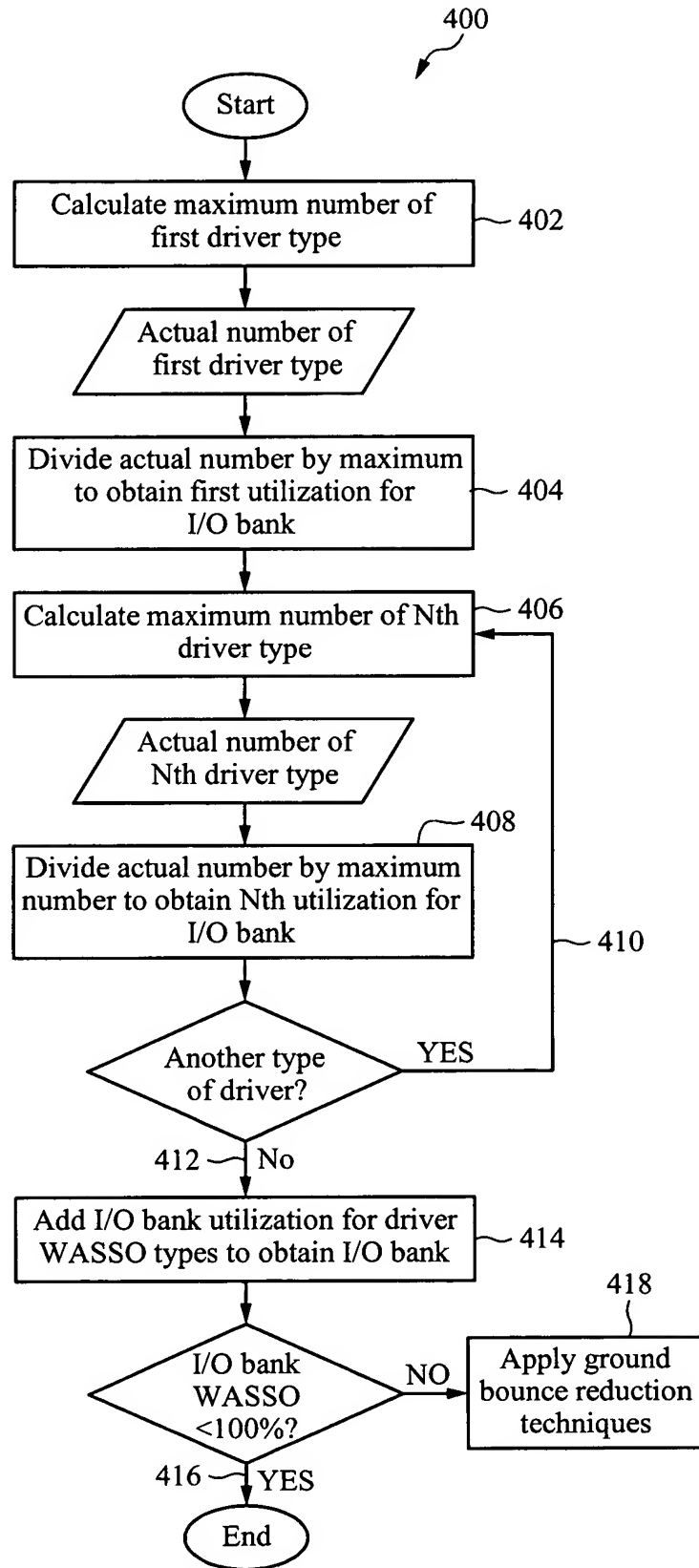


FIG. 4

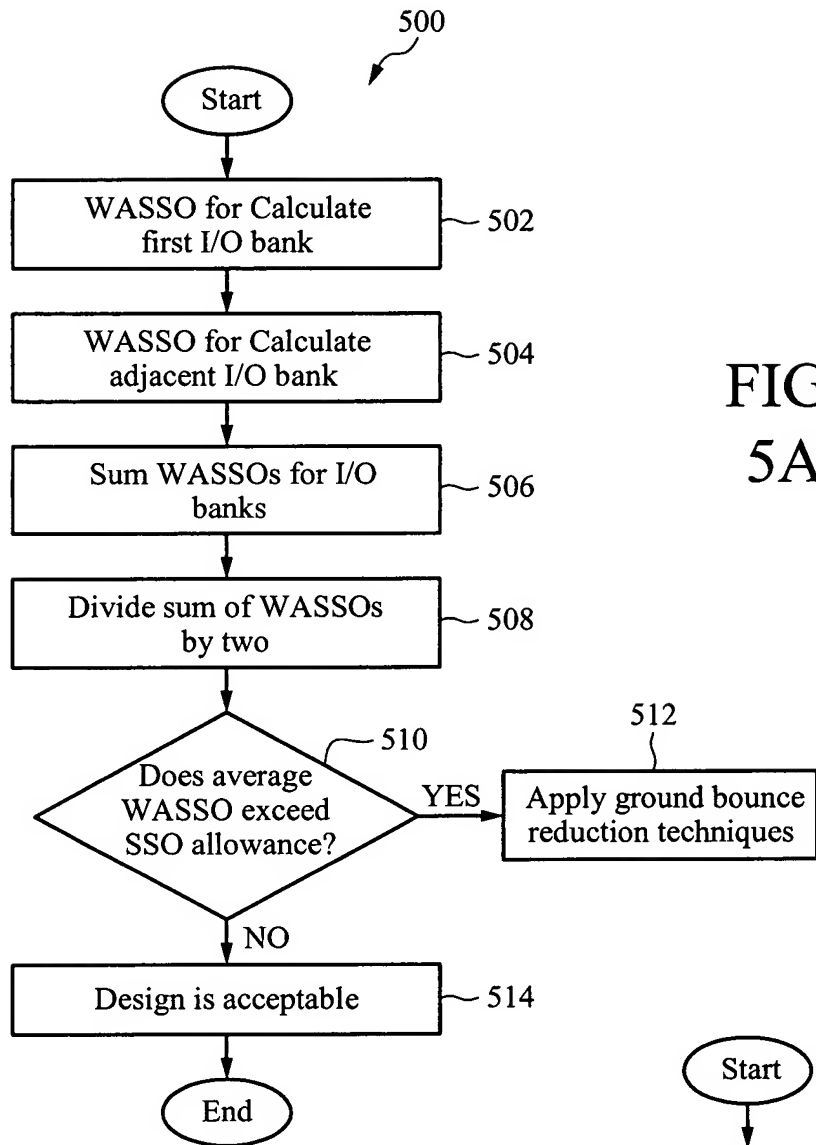
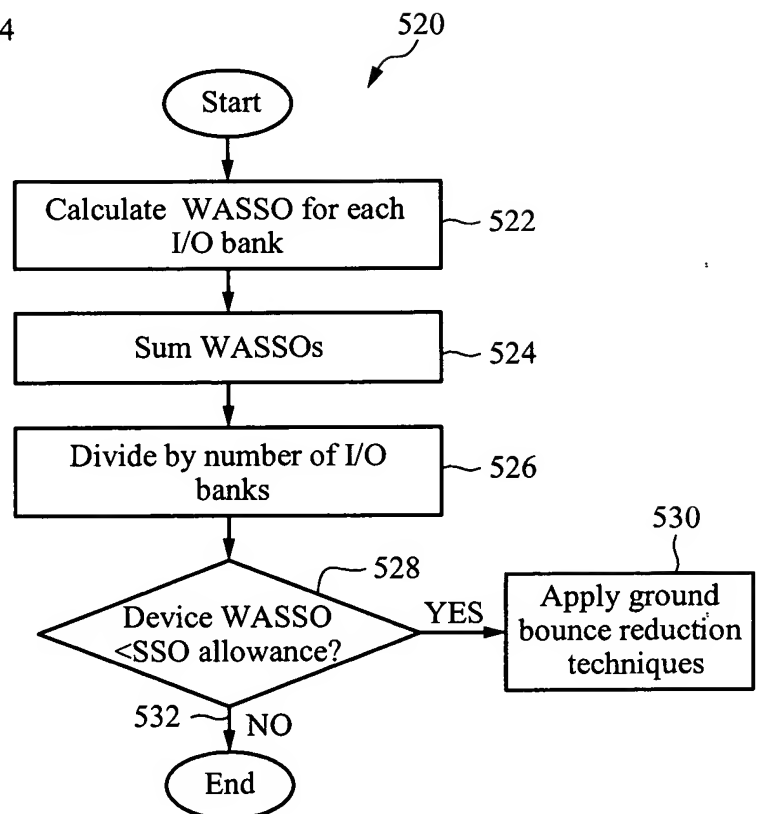


FIG. 5B



# PCB Design Parameters

Board Thickness  
Via Diameter (Finished)  
Pad-to-Via Break-out Length  
Width Break-out  
Other PCB Parasitic Inductances  
Socket Inductance  
Calculated Via Inductance  
Calculated Break-out Inductance  
Calculated Total Inductance

62	mils
12	mils
17	mils
12	mils
0	nH
0	nH
0.72	nH
0.09	nH
0.80	nH

Enter Design parameters in blue cells  
Click on each colored cell for "pop-up" comments

Check all cells at bottom for "OK" status  
Must resolve all cells with "Not OK" status

Grey cells show calculation result based on user inputs

Devices Driven by FPGA Outputs  
Max Input Low Voltage Threshold  
Max Input Undershoot (Absolute Value)  
Max Ground Bounce Allowed

	Dev 1	Dev 2	Dev 3	Dev 4	Dev 5	Dev 6	Dev 7	Dev 8	Dev 9	Dev 10	Dev 11	Dev 12	Dev 13	Dev 14	Dev 15
800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800
600	800	800	800	800	800	800	700								

Physical Description of Output Loads  
# of Nets with Similar Load Characteristics  
# Loads per Net  
Maximum Load Capacitance per Device  
Calculated Capacitance per net in Group  
Calculated Average Capacitance per Load

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	Grp 9	Grp 10	Grp 11	Grp 12	Grp 13	Grp 14	Grp 15
30	40	50	60	70	80	90									
7	6	5	4	3	2	1									
7	7	7	7	7	7	7	31								
49	42	35	28	21	14	217	0	0	0	0	0	0	0	0	0

# FPGA Allocation of Resources

# I/O banks in package  
# Power/GND pairs in each I/O bank  
Type 1 # of Drivers Used  
Type 1 # of SSOs allowed per Power/GND pair  
Type 2 # of Drivers Used  
Type 2 # of SSOs allowed per Power/GND pair  
Type 3 # of Drivers Used  
Type 3 # of SSOs allowed per Power/GND pair  
Type 4 # of Drivers Used  
Type 4 # of SSOs allowed per Power/GND pair  
Type 5 # of Drivers Used  
Type 5 # of SSOs allowed per Power/GND pair

Bank 0	Bank 1	Bank 2	Bank 3	Bank 4	Bank 5	Bank 6	Bank 7
8	13	13	13	13	13	13	13
43	12	12	19	19	3	6	10
5	5	5	5	5	5	5	5
30	24	30	30	30	30	30	0
10	10	10	10	10	10	10	10
22	22	22	22	22	22	22	0
22	22	22	22	22	22	22	22
7	7	7	7	7	7	7	7
4	4	4	4	4	4	4	4

# WASSO Utilization & Status

Bank SSO Allowance  
Bank WASSO Utilization  
Bank WASSO Status  
2-bank SSO Allowance  
2-bank WASSO Utilization  
2-bank WASSO Status

Bank 0	Bank 1	Bank 2	Bank 3	Bank 4	Bank 5	Bank 6	Bank 7
100%	100%	100%	100%	100%	100%	100%	100%
96.9%	44.6%	49.2%	60.0%	60.0%	35.4%	40.0%	15.4%
OK	OK	OK	OK	OK	OK	OK	OK

Package SSO Allowance  
Package WASSO Utilization  
Package WASSO Status

100%	624
50.2%	626
OK	OK

FIG. 6